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November 30, 2011

Ms. Carmen Anderson
Indiana Department of Environmental Management
Office of Land Quality – Voluntary Remediation Program
100 North Senate Avenue
Indianapolis, Indiana 46204

Re: Notification of Additional Soil and Groundwater Investigation Activities
Michigan Plaza
3801-3823 West Michigan Street
Indianapolis, Indiana
MUNDELL Project No. M01046

Dear Ms. Anderson:
MUNDELL & ASSOCIATES, INC. (MUNDELL) is pleased to submit this notification of additional soil and groundwater investigation activities to the Indiana Department of Environmental Management (IDEM) for the Michigan Plaza Site located at 3801 – 3823 West Michigan Street in Indianapolis, Indiana. This scope of work includes the installation of sixteen (16) soil borings, four (4) of which will be converted into permanent monitoring wells.

WORK SCOPE

The following tasks will be completed to further delineate soil and groundwater impacts south, east and west of the Site.

Task 1 – Soil Boring Advancement

Sixteen (16) soil borings (GP-20, GP-21, GP-22, GP-23, GP-24, GP-25, GP-26, GP-27, GP-28, GP-29, GP-30, GP-31, MMW-P-11DR, MMW-P-14S, MMW-P-14D and MMW-P-15D) will be advanced to establish current soil and groundwater conditions to the south, east and west of the Site.

Each soil boring will be cleared for utilities to a depth of five feet below ground surface (bgs) utilizing ground-penetrating radar (GPR). Following utility clearance, a Geoprobe® direct-push unit will be utilized to advance the soil borings. Soil samples will be collected continuously during each boring and the samples classified by a MUNDELL scientist. Five (5) soil borings will be advanced to a depth of 40 feet bgs (GP-30 and GP-31; MMW-P-11DR, MMW-P-14S and MMW-P-15S), while the remaining eleven (11) soil boring locations will be completed to depths of approximately 50 feet

bgs (borings GP-20 to GP-29; MMW-P-14D; MMW-P-15D), or until the basal till unit is encountered. The depths of the basal till have been estimated from data gathered from geophysical profile lines and nearby borings. A photo-ionization detector will be used to screen soil samples for total photo-ionizable vapors (TPV). Soil samples with elevated TPV readings will be retained for laboratory analysis. Should no TPV be indicated during field screening activities, two soil samples from each location will be submitted for laboratory analysis, one from immediately above the saturated zone and one from the base of the soil boring. It should be noted that because soil borings MMW-P-14S and MMW-P-14D are being advanced in preparation for the installation of a nested well set, soil samples will be collected for laboratory analysis solely from the deep soil boring location. In addition, no soil samples will be collected from MMW-P-11DR as it is a replacement well for MMW-P-11D (abandoned in October 2011). Soil samples submitted for Volatile Organic Compounds (VOCs) analysis will be collected via the United States Environmental Protection Agency (U.S. EPA) SW-846 collection method 5035. Soil samples submitted for Fraction Organic Carbon (foc) analysis will be collected according to the Walkley-Black method. All soil cuttings will be containerized in 55-gallon DOT drums, labeled properly and disposed of appropriately.

All field procedures, including soil boring advancement, soil sampling, screening and classification, monitoring well installation and groundwater sampling and testing, will be completed in accordance with current IDEM protocols. Selected soil samples will be submitted to Pace Analytical Laboratories (Pace) in Indianapolis, Indiana, for analysis of VOCs utilizing U.S. EPA SW-846 Test Method 8260, and for foc analysis utilizing the Walkley-Black Method.

Groundwater samples will be collected from soil borings for the purpose of vertical groundwater delineation. It should be noted that because soil borings MMW-P-14S and MMW-P-14D are being advanced in preparation for the installation of a nested monitoring well set, groundwater samples will be collected for laboratory analysis solely from the deep soil boring location. In addition, no groundwater samples will be collected from MMW-P-11DR as it is a replacement well for MMW-P-11D (abandoned in October 2011). Three tiered groundwater samples will be collected from each soil boring location at depths ranging between approximately 20 feet and 50 feet bgs. Groundwater will be transferred into appropriate laboratory-supplied containers, placed on ice and submitted to Pace for VOCs analysis via U.S. EPA SW-846 Method 8260.

To expedite upcoming remedial activities at the Site, all soil and groundwater analyses will be submitted for rush analysis with a turnaround time of five days.

Task 2 – Monitoring Well Installation

MUNDELL will coordinate and oversee the installation of four (4) monitoring wells in the four previously identified soil boring locations, **MMW-P-11DR, MMW-P-14S, MMW-P-14D** and **MMW-P-15D**. The deep monitoring wells, **MMW-P-11DR, MMW-P-14D** and **MMW-P-15D** will be installed at the base of the aquifer unit. The 5 foot screened interval will extend to the aquifer/till interface. This location will monitor conditions in the deep aquifer interval. The shallow monitoring well will be installed

adjacent to **MMW-P-14D** and utilize a 10 foot screen located within the appropriate depth interval to monitor the upper saturated zone of the aquifer. All monitoring well locations are presented on **Figure 1**.

The monitoring wells will be constructed of two-inch diameter, flush-joint, threaded Schedule 40 PVC materials and the screen will be constructed using 0.010 inch machine-slotted PVC. Anticipated screen lengths for the 30 feet and 40 feet monitoring wells will be 10 feet and 5 feet, respectively. A sand filter pack, consisting of No. 4 sand, will be installed around the bottom of each screen to a height of approximately one to two feet above the top of the screen. Bentonite chips will be placed into the annular space around the riser and hydrated to create a seal to near the ground surface. The monitoring wells will be finished with a flush-mounted, bolt-down steel manhole cover set in place with a concrete pad to provide protection and stability to the wells. The wells will be properly developed in order to clean the well and screen pack of silt and debris. The well will then be fitted with a watertight well cap to prevent the infiltration of surface water.

Following installation and development, the monitoring wells will be surveyed into the existing monitoring well network prior to first quarter 2012 groundwater sampling activities. All development water generated during these investigation activities will be stored in 55-gallon DOT drums, labeled properly, and will be removed from the Site promptly to be disposed appropriately.

SCHEDULE

The additional soil and groundwater investigation activities described above are scheduled to begin on Monday, December 5, 2011.

We appreciate the opportunity to update IDEM on the soil and groundwater investigation activities upcoming at the Site. If you have any questions, please do not hesitate to contact us at (317) 630-9060 or via email (jmundell@MundellAssociates.com; swebb@MundellAssociates.com).

Sincerely,
MUNDELL & ASSOCIATES, INC.

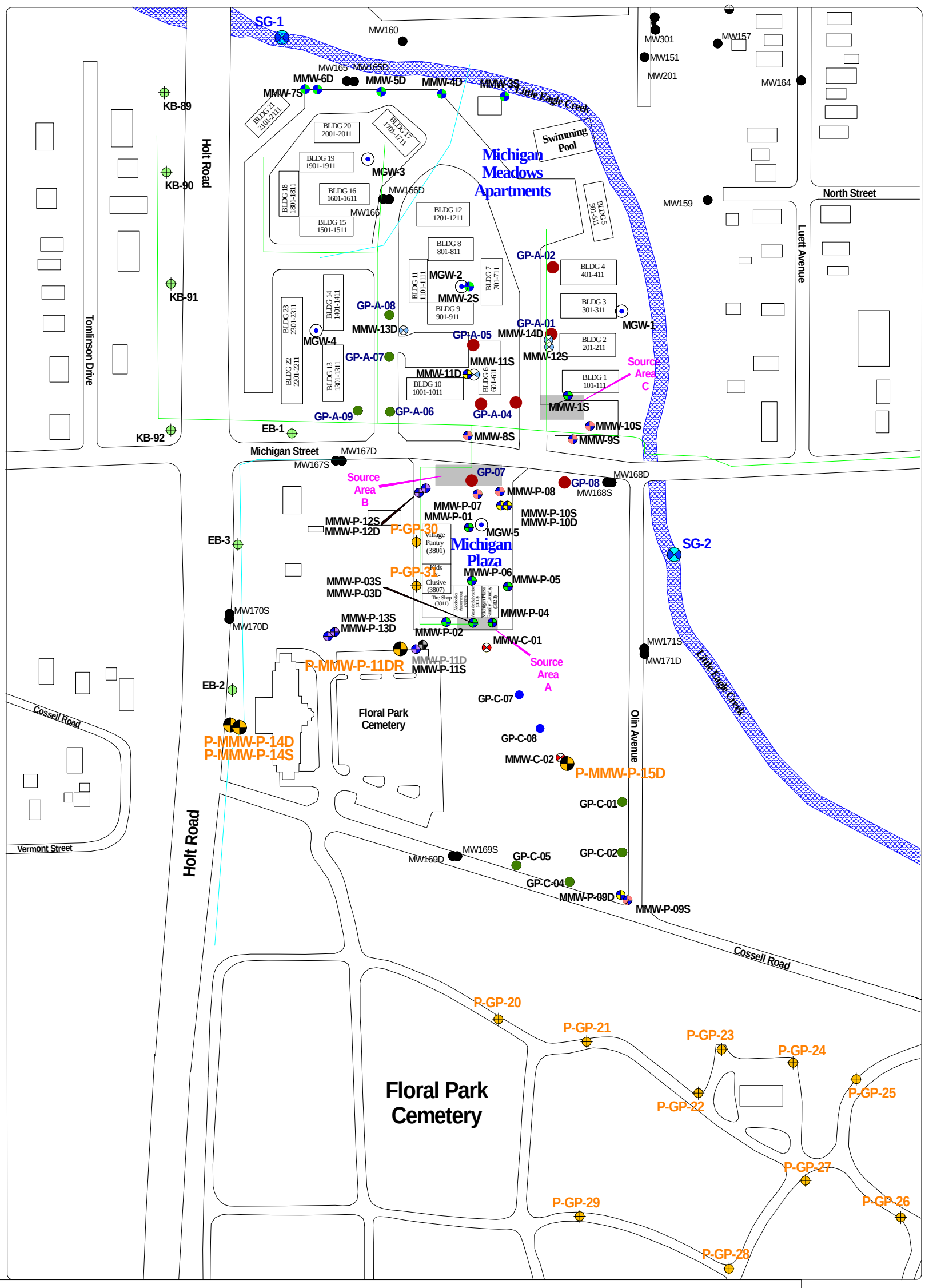
Sarah E. Webb, L.P.G.
Project Hydrogeologist

John A. Mundell, P.E., L.P.G.
President/Senior Environmental Consultant

/sew

Attachments: Figure 1

cc: Shelly Lam, U.S. EPA
Bruce George, Buchanan Group - Floral Park Cemetery



LEGEND

	Fence
MW160	Keramida/Environ Monitoring Wells
MMW-P-06	MUNDELL Monitoring Wells, Michigan Plaza (September 2005)
MMW-P-07	MUNDELL Monitoring Wells (January 2007)
MMW-P-09D	MUNDELL Monitoring Wells (May-June 2007)
MMW-C-01	MUNDELL Monitoring Wells (July/August 2008)
MMW-11S	MUNDELL Monitoring Wells (November/December 2008)
GP-C-05	MUNDELL Soil Boring Locations (January 2007)
GP-07	MUNDELL Soil Boring Locations (September 2005)
GP-C-08	MUNDELL Soil Boring Locations (August 2008)
MMW-P-11D	MUNDELL Monitoring Wells (September 2011)
MGW-1	MUNDELL Soil Gas Well
P-MMW-P-14D	Planned Monitoring Well Location
P-GP-21	Planned Soil Boring Location
MMW-P-11D	Abandoned Monitoring Well Location
EB-2	Environ Soil Borings
	Sanitary Sewer
	Storm Sewer

NORTH

SCALE 0 200 feet

Keramida Monitoring Well Locations Referenced from Keramida Environmental, Inc.
Project No. 2829
March 13, 2002

Mundell Consulting Professionals for the Earth and the Environment
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Project Number: M01046
Drawing File: PropLoc 11.2011.skf
Date Prepared: 11/28/2011
Scale: 1"=200'

Planned Additional Investigation Activities

Michigan Plaza
3801 - 3823 West Michigan Street
Indianapolis, Indiana

FIGURE
1